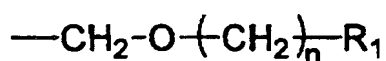


CLAIMS

1. A polymer compound comprising:
an alkali soluble group (i), wherein

5 at least one hydrogen atom of the alkali soluble group (i) is substituted by an
acid dissociable, dissolution inhibiting group (ii) represented by a general formula (1):



(1)

(wherein R₁ represents a cycloaliphatic group which contains no more than 20
carbon atoms and may contain an oxygen atom, a nitrogen atom, a sulfur atom, or a
10 halogen atom, and n represents 0 or an integer of 1 to 5.), and
the polymer compound exhibits changed alkali solubility under the action of an
acid.

2. A polymer compound according to claim 1, wherein the alkali soluble group (i)
15 is at least one selected from an alcoholic hydroxyl group, a phenolic hydroxyl group, or a
carboxyl group.

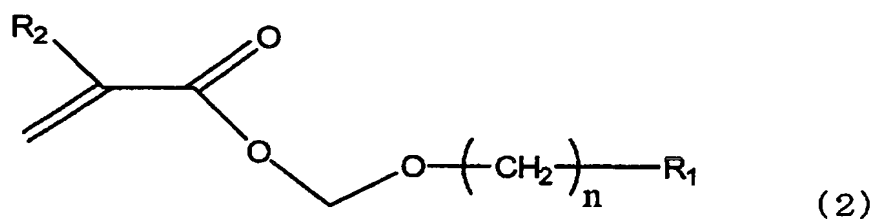
3. A polymer compound according to claim 2, wherein a carbon atom adjacent to
the carbon atom bonded to the alcoholic hydroxyl group is bonded to at least one fluorine
20 atom.

4. A polymer compound according to claim 1, wherein the cycloaliphatic group
contains an adamantane backbone.

5. A polymer compound according to claim 1, wherein R_1 represents the cycloaliphatic group containing at least one hydrophilic group.

5 6. A polymer compound according to claim 1, wherein the hydrophilic group is at least one selected from the group consisting of a carbonyl group, an ester group, an alcoholic hydroxyl group, ether, an imino group, and an amino group.

7. A compound represented by a general formula (2):

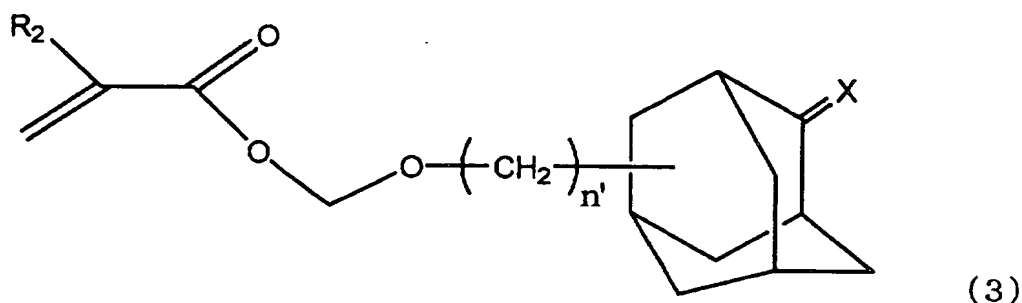


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(wherein R_1 represents a cycloaliphatic group which contains no more than 20 carbon atoms and may contain an oxygen atom, a nitrogen atom, a sulfur atom, or a halogen atom; n represents 0 or an integer of 1 to 5; and R_2 represents a hydrogen atom, a fluorine atom, a lower alkyl group containing 1 to 20 carbon atoms, or a fluorinated lower alkyl group containing 1 to 20 carbon atoms.).

15

8. A compound according to claim 7, represented by a general formula (3):



(wherein R_2 represents the same as the aforementioned, X represents two hydrogen atoms or an oxygen atom, and n' represents 0 or 1.).

5 9. A polymer compound according to claim 1, comprising a structural unit (a1) derived from the compound according to claim 7.

10. A polymer compound according to claim 1, comprising a structural unit (a1) derived from the compound according to claim 8.

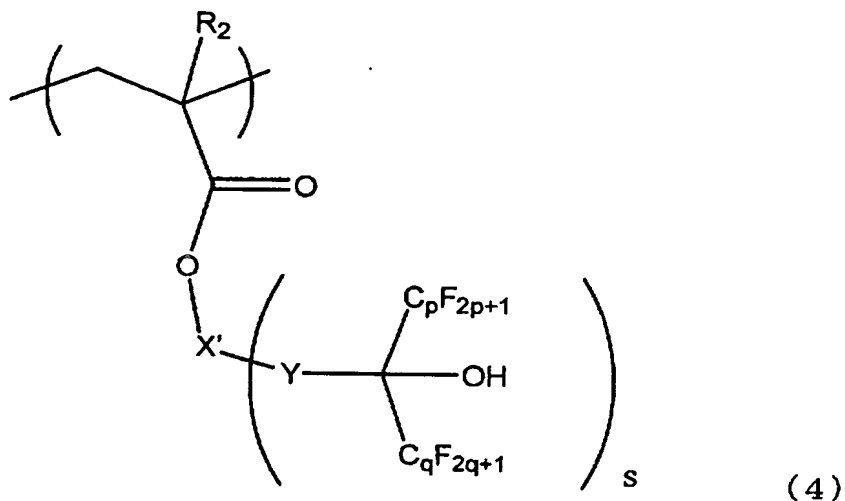
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11. A polymer compound according to claim 9, further comprising a structural unit (a3) derived from (meth)acrylate containing a lactone-containing monocyclic or polycyclic group.

15 12. A polymer compound according to claim 11, wherein the structural unit (a3) comprises at least two mutually different structural units derived from (meth)acrylate containing a lactone-containing monocyclic or polycyclic group.

13. A polymer compound according to claim 11, further comprising a structural unit
20 (a4) derived from (meth)acrylate containing a polar group-containing polycyclic group.

14. A polymer compound according to claim 9, further comprising a structural unit (a6) represented by a general formula (4):



- 5 (wherein R_2 represents the same as the aforementioned, X' represents a divalent or trivalent cyclic group, Y represents an alkylene or alkyleneoxy group containing 1 to 6 carbon atoms which is divalent, p and q independently represent an integer of 1 to 5, and s represents an integer of 1 or 2.).

- 10 15. A photoresist composition comprising:
- a base material resin component (A) which exhibits changed alkali solubility under the action of an acid; and
- an acid generator component (B) which generates the acid on exposure to radiation, wherein
- 15 the base material resin component (A) is the polymer compound according to any one of claims 1, 9, or 10.

16. A photoresist composition according to claim 15, further comprising a nitrogen-containing organic compound (D).
17. A resist pattern formation method comprising:
- 5 forming a photoresist film on a substrate using the photoresist composition according to claim 15;
- exposing the photoresist film; and
- developing the exposed photoresist film to form a resist pattern.